

Computing



		Year 7	2 lessons per fortn	ight
	Wk	Topic	Learning Aims	Assessment
Autumn	2	Internet Safety	Be responsible, competent, confident and creative users of information and communication technology.	
			Understand a range of ways to use	
	3		technology safely, respectfully,	
	4		responsibly and securely, including protecting their online identity and privacy; recognise inappropriate	
	5		content, contact and conduct, and know how to report concerns.	
	6		Explore issues around friending online, digital footprints and their impact upon	
	7		their future, social media and dangers surrounding the use of each of these.	
	8		Develop an understanding of how being a digital native can impact their life and how best to be prepared for	
	9		the use of technology.	
	10		Key vocabulary:	
	11		policies, digital footprint, impact, consequences, choices.	
	12			
	13			
	14			End of unit E-safety Assessment/Quiz Learning Journal / Teacher assessment.
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Spring	1	Computational Thinking	Design, use and evaluate computational abstractions that model	
	2		the state and behaviour of real-world problems and physical systems.	
	3		Understand several key algorithms that	
	4		reflect computational thinking [for example, ones for sorting and	
	5		searching]; use logical reasoning to compare the utility of alternative	
	6		algorithms for the same problem.	
	7		Key vocabulary: decomposition, algorithm, abstraction	
	8		pattern recognition, debugging, problem, trends, pseudocode, flow	
	9		charts.	
	10			
	11			End of unit Assessment/Quiz Learning Journal / Teacher assessment.
	12			
Summer	1	Micro; Bits	Analyse problems in computational terms, and have repeated practical	
	2		experience of writing computer programs in order to solve such problems.	
	3		Design, use and evaluate	
	4		computational abstractions that model the state and behaviour of real-world	
	5		problems and physical systems.	
	6		Understand several key algorithms that reflect computational thinking [for example, ones for sorting and	
	7		searching]; use logical reasoning to compare the utility of alternative	
	8		algorithms for the same problem.	
	9		Key vocabulary: Micro:bit, component, button, LED, code, block, USB, transfer, editor,	
	10		compile, input, output.	End of unit Assessment/Quiz Learning Journal /
	11			Teacher assessment.
	12			

Year 8	2 lessons per for	tnight
Topic	Learning Aims	Assessment
Internet Safety	Be responsible, competent, confident and creative users of information and communication technology	
	Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns.	
	Explore issues around technology and the growing dangers they can face with relation this (e.g. grooming).	
	Explore scenarios and instances where things have gone wrong and learn how best to deal with such instances.	
	Key vocabulary: identity, social media, privacy, protection, CEOP, responsibility, social media, social networking, friending, sexting, laws.	
		End of unit E-safety Assessment/Quiz Learning Journal / Teacher assessment.
lmaide c	Understand the hardware and	
Inside a Computer	software components that make up	
·	computer systems, and how they	
	communicate with one another and with other systems.	
	Understand how instructions are stored and executed within a computer system; understand how	
	data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits.	
	Key vocabulary: computer, input, output, device, data, hardware, software, binary,	
	code	
		End of unit Assessment/Quiz Learning Journal / Teacher assessment.
Scratch –	Use two or more programming	
Games maker (Retro)	languages, at least one of which is textual, to solve a variety of computational problems; make	
	appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or	
	functions.	
	Key vocabulary: procedures, functions, variables, score systems, gravity, blocks,	
	control, logic.	
		End of whit
		End of unit Assessment/Quiz Learning Journal / Teacher assessment.